

17795 (AP)

bowel disease, etc.) shock, bone disease characterized by abnormal bone metabolism such as osteoporosis (especially, postmenopausal osteoporosis), hypercalcemia, hyperparathyroidism, Paget's bone diseases, osteolysis, hypercalcemia of malignancy with or without bone metastases, rheumatoid arthritis, periodontitis, osteoarthritis, ostealgia, osteopenia, cancer cachexia, calculosis, lithiasis (especially, urolithiasis), solid carcinoma, mesangial proliferative glomerulonephritis, edema (e.g. cardiac edema, cerebral edema, etc.), hypertension such as malignant hypertension or the like, premenstrual tension, urinary calculus, oliguria such as the one caused by acute or chronic failure, hyperphosphaturia, or the like."

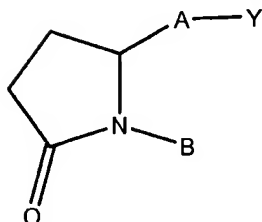
United State Patent No 6,710,072 teaches the use of EP2 agonists for the treatment or prevention of "osteoporosis, constipation, renal disorders, sexual dysfunction, baldness, diabetes, cancer and in disorder of immune regulation... various pathophysiological diseases including acute myocardial infarction, vascular thrombosis, hypertension, pulmonary hypertension, ischemic heart disease, congestive heart failure, and angina pectoris."

BRIEF DESCRIPTION OF THE DRAWING FIGURES

Figures 1-¹⁷~~16~~ show examples of methods that can be used to prepare the compounds disclosed herein.

DESCRIPTION OF THE INVENTION

A compound is disclosed herein comprising



or a pharmaceutically acceptable salt, prodrug, or a metabolite thereof;

wherein Y is an organic acid functional group, or an amide or ester thereof comprising up to 12 carbon atoms; or Y is hydroxymethyl or an ether thereof comprising up to 12 carbon atoms; or Y is a tetrazolyl functional group;

A is $-(CH_2)_6-$, *cis* $-CH_2CH=CH-(CH_2)_3-$, or $-CH_2C\equiv C-(CH_2)_3-$, wherein 1 or 2 carbon atoms may be substituted with S or O; or A is $-(CH_2)_m-Ar-(CH_2)_o-$ wherein Ar is interarylene or

heterointerarylene, the sum of m and o is from 1 to 4, and wherein one CH_2 may be substituted with S or O; and

B is aryl or heteroaryl.

lem
12/2/08